## University Accreditation Results (Results for Certified Evaluation and Accreditation for university)

# Toyota Technological Institute



Basic Information of the Institution	
Ownership: Private	Location: Aichi, Japan
Accreditation Status	
Year of the Review: 2023	
Accreditation Status: accredited	(Accreditation Period: April 1, 2024 – March 31, 2031)

## Certified Evaluation and Accreditation Results for Toyota Technological Institute

#### **Overview**

Toyota Technological Institute defines the purpose of its undergraduate and graduate schools as conducting educational and research activities in close interaction and cooperation with society in order to contribute to the advancement of academic culture and society, based on its founding philosophy and motto of "Respect the spirit of research and creativity, and always strive to stay ahead of the times." The Institute has formulated the Medium-Term Plan III for the five-year period from AY2019 with visions that include "taking advantage of small-group instruction to enhance its unique education and develop human resources with practical creativity, thereby increasing its presence" and "selecting and focusing on specific fields of research to deliver world-leading outcomes." The Institute actively engages in educational and research activities by adopting specific measures to achieve these visions.

The Institute developed an internal quality assurance promotion system in AY2020 with the Self-Study Committee tasked with promoting internal quality assurance renamed the Internal Quality Assurance Committee, along with the establishment of the Regulations on the Internal Quality Assurance Policy and Procedures. The Internal Quality Assurance Committee examines each committee's activities related to education, research, and self-studies based on a report prepared by the Institute Evaluation Committee specified as an organization overseeing the self-studies. The Future Responses (Measures for Improvement) compiled by the Internal Quality Assurance Committee is reported to the president, who presents it with the President's Views to the relevant divisions through the Internal Quality Assurance Committee to undertake improvement activities. For example, following the AY2021 inspection and assessment results, the president's views called on the Academic Affairs Committee to upgrade the doctoral program's education in cooperation with the Doctoral Program Committee and other organizations. In response, the Academic Affairs Committee and relevant divisions continuously work to enhance instruction in the doctoral program.

As for education, the Institute introduced the curricula in AY2022 with a focus on "fostering engineers and researchers with ability for logical thinking," following the revision of its three diploma, curriculum, and admission policies. Active learning is adopted in many subjects to encourage students' independent learning. Notably, the Creativity Development Program consists mainly of practical subjects conducted on campus and off, with off-campus practical training provided for first-year and third-year students. The program also continues to offer education aimed at nurturing students' creativity by utilizing problem-solving skills learned in dormitory life, while reviewing the themes of the Creative Development Training and Creativity Development Seminar to fit the times, in pursuit of further progress. The program helps students enhance their creative abilities in knowledge and technical skills as well as communication and applied skills during the four years of studies. This is a distinctive initiative to realize the Institute's founding philosophy. The graduate school arranges active learning subjects, including Off-campus Training Domestic\_Graduate Course and the Off-campus Training-Doctor Course, for students to experience learning opportunities in business settings in line with the diploma policy.

Among the Institute's outstanding student support initiatives is the Boarding Educational System for First-Year Students in which upper-year supporters provide first-year undergraduate students with study and campus life guidance. The supporters work with faculty members who serve as academic advisors to offer multifaceted assistance tailored to individual students. Moreover, the Collaborative Clean Room and the Creativity Development Studios(EijiKōbō), where students engage in production and experiments under the guidance of technical instructors with business experience, are used not only for experiments and practical training subjects but also graduation research, master's and doctoral research, extracurricular activities, and other purposes. The Institute's efforts to create an educational and research environment dedicated to student learning are outstanding.

There is an area of improvement the Institute should address, however. The Graduate School of Engineering (Master's Program) only specifies the skills to be trained in its curriculum policy, and does not state the basic concepts of curriculum design and implementation. This issue should be addressed.

In the years ahead, the Institute is expected to comprehensively organize and utilize its internal data to verify the appropriateness of various activities, identify the issues of educational and research activities, and advance its distinctive initiatives through internal quality assurance efforts, thereby progressing further.

#### **Notable Strengths**

#### Educational Program and Learning Outcomes

• The Institute continues to offer the Creativity Development Program as a four-year educational initiative aimed at fostering students' abilities to independently identify challenges, develop solutions, and take action. This program features a variety of practical training sessions, including acquiring the literacy required of engineers and tackling manufacturing challenges at companies, and seminars for team manufacturing, with the acquired skills applicable to graduation research. The Institute has upgraded the program by offering the Engineering start-up Seminar designed for students to develop their career plans during the first year and to enhance independent learning through boarding life, as well as Off-Campus Training for first-year and third-year students. It is commendable that the program nurtures students' creative abilities in terms of knowledge, technical skills, challenging spirit, communication skills, and applied skills.

### Student Support

• The Institute has long introduced the Boarding Educational System for First-Year Students to encourage first-year students to actively interact with each other through boarding life, while providing them with various types of assistance, such as supporters selected from upper-year students offering study counseling and lifestyle guidance, and working with academic advisors to help connect boarding students with on-campus support as necessary. Boarding is contributing to the advancement of the Institute's education, as it has been utilized for introductory education to encourage first-year students to actively engage in learning. In addition, it is highly commendable that the program is also helping supporter students become more independent.

### Education and Research Environment

• To foster next-generation international industry leaders, the Creativity Development Studios provides many machine tools to enable students to manufacture experimental parts and devices under the guidance of technical instructors with business experience. The Collaborative Clean Room is designed for semiconductor research and offers technical training for students to acquire general knowledge of semiconductor technologies. It is commendable that the Institute is well-equipped with advanced facilities as a school specializing in engineering fields for active use in both curricular and extracurricular activities.

## **Suggestions for Improvement**

## Educational Program and Learning Outcomes

• The Graduate School of Engineering (Master's Program) only specifies the skills to be trained in its curriculum policy, and does not state the basic concepts of curriculum design and implementation. This issue should be addressed.